Luminex®
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## Quick Reference Card

# Muse® Nitric Oxide Kit MCH100112

For the detection of Nitric Oxide (NO) activity in combination with cell death in cellular samples

For Research Use Only. Not for use in diagnostic procedures.

### Storage Conditions

Store the Muse® Nitric Oxide Reagent at –15° to –25°C, protected from light.

Store the Muse 7-AAD and 1X Assay Buffer at 2° to 8°C, protected from light.

### Kit Components

- Muse® Nitric Oxide Reagent (Part No. 4700-1666, 100 tests/vial)
- Muse 7-AAD Reagent (Part No. 4700-1673, 100 tests/vial)
- 1X Assay Buffer (Part No. 4700-1330, 100 mL/vial)

### Materials Recommended

- Guava® Muse® Cell Analyzer
- Cell suspension; untreated and treated
- Micropipettors
- Disposable micropipettor tips
- Microcentrifuge tubes with screw caps, 1.5 mL (VWR Catalog No. 16466-030, or equivalent)
- Muse Count & Viability CDR (Catalog No. MCH100107), optional
- Vortex mixer

### Assay Protocol

Culture cells, including positive and negative controls by desired method.

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Prepare cell samples in 1X Assay Buffer at 1 x $10^6$ to 1 x $10^7$ cells/mL for incubation with Muse® Nitric Oxide working solution.

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Dilute Muse Nitric Oxide Reagent 1:1000 with 1X Assay Buffer to make Muse® Nitric Oxide working solution.

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Add 2 µL of Muse® 7-AAD to 88 µL of 1X Assay Buffer to make Muse 7-AAD working solution.

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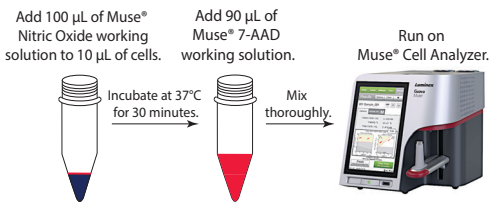



**NOTE:** A detailed kit user's guide can be found at *www.luminexcorp.com/flowkits* (search by Catalog No. MCH100112).

## Expected Results

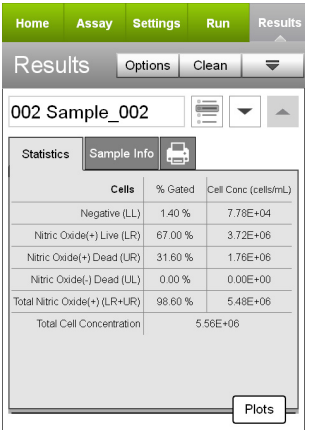
The figures below show an example of results using the Muse® Nitric Oxide Kit to stain RAW 264.7 cells treated with Lipopolysaccharide and mouse IFNg to induce nitric oxide (NO) expression.

Events in each of the four quadrants are as follows:

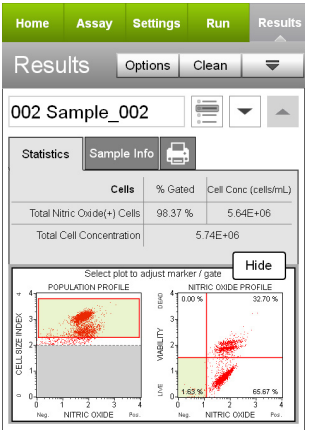
- LL quadrant: Viable Cells with no Nitric Oxide Activity, [Nitric Oxide(-) and Dead Cell Marker (-)]
- LR quadrant: Live Cells with Nitric Oxide Activity, [Nitric Oxide(+) and Dead Cell Marker (-)]
- UR quadrant: Dead Cells with Nitric Oxide Activity, [Nitric Oxide(+) and Dead Cell Marker (+)]
- UL quadrant: Dead Cells with no Nitric Oxide Activity [Nitric Oxide(-) and Dead Cell Marker (+)]

**Figures A and B.** Results obtained from RAW264.7 cells treated with 100 nM LPS and 100 U/mL mouse IFNY for 22 hours and stained with the Muse Nitric Oxide Kit, then acquired on the Guava® Muse Cell Analyzer. Figure A shows results without dot plots, while Figure B shows the same results with optional dot plots. The statistics show the cells/mL in the stained cell sample and the percentages of each population. The first plot in B shows Nitric Oxide vs. Cell Size and the second plot shows Nitric Oxide vs. Viability.

A




B




For more information, refer to the comprehensive user's guide, which can be found at *www.luminexcorp.com/flowkits* (search for Catalog Code, MCH100112).

## Related Products

For Research Use Only. Not for use in diagnostic procedure.

- Muse® System Check Kit – MCH100101
- Muse® Count & Viability Kit (40 mL) – MCH100102
- Muse® Annexin V & Dead Cell Kit – MCH100105
- Muse® Caspase-3/7 Kit – MCH100108
- Muse® MultiCaspase Kit – MCH100109
- Muse® MitoPotential Kit – MCH100110
- Muse® Oxidative Stress Kit – MCH100111
- Muse® Ki67 Proliferation Kit – MCH100114

The latest version of Muse software, which includes all assay modules, as well as the kit user's guide, can be found at *www.luminexcorp.com/flowkits*.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